DOCUMENT RESUME

ED 220 025 HE 015 384

AUTHOR Freeman, Nancy S.
TITLE Computer Analysis of a Faculty Information System. AIR Forum 1982 Paper.
PUB DATE May 82
NOTE 31p.; Paper presented at the Annual Forum of the Association for Institutional Research (22nd, Denver, CO, May 16-19, 1982).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Accountability; *College Faculty; *Computer Oriented Programs; Data Analysis; Databases; *Full Time Faculty; Government School Relationship; Higher Education; *Information Systems; Institutional Research; National Surveys; Program Descriptions; Questionnaires; Recordkeeping; Records (Forms); Reports; Statistical Data; Teacher Characteristics; Teacher Employment Benefits; *Teacher Salaries; *Tenure
IDENTIFIERS *AIR Forum; Higher Education General Information Survey

ABSTRACT

The development and implementation of an information system concerning full-time faculty are described. The system originated as a direct result of the need to complete the full-time faculty salaries, tenure, and fringe benefits section of the annual Higher Education General Information Survey (HEGIS) report. This approach uses computer analysis as the methodological base for form completion. Attention is directed to the design of the system, its methodology, and its use. Copies of the survey form, code schematic, and computer analysis program are included to allow for replication. Eighteen data categories were designated as information needed to complete a wide range of internal and external requests for data about full-time faculty. The Statistical Package for the Social Sciences (SPSS) was used to analyze the data. This information system permits timely and accurate reporting using minimal resources and can help the office of institutional research keep academic and administrative officers well-informed. Data concerning faculty rank, gender, age, and degree earned are items frequently requested by peer institutions, government, and accrediting agencies. The system provides information concerning salaries and tenure of faculty holding 9-month and 12-month contracts. Salary information is presented according to rank for each gender. Information is also presented by departments, school, or campus on tenure status, and fringe benefits for full-time faculty. A sample HEGIS form (HEGIS XVI) is appended. (SW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

12F 15

ED220025

COMPUTER ANALYSIS OF A FACULTY INFORMATION SYSTEM

Nancy S. Freeman, Ph.D.
Assistant Director, Institutional Research
University of Detroit

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

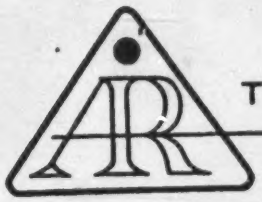
"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Association for Institutional Research

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Prepared for Presentation at the Twenty-Second Annual AIR Forum
May 16-19, 1982 - Denver, Colorado

HE 015 384



THE ASSOCIATION FOR INSTITUTIONAL RESEARCH

This paper was presented at the Twenty-Second Annual Forum of the Association for Institutional Research held at the Denver Hilton Hotel in Denver, Colorado, May 16-19, 1982. This paper was reviewed by the AIR Forum Publications Committee and was judged to be of high quality and of interest to others concerned with the research of higher education. It has therefore been selected to be included in the ERIC Collection of Forum papers.

D. R. Coleman, Chairman
Forum Publication
Advisory Committee

ABSTRACT

The purpose of this paper is to describe the development and implementation of an information system concerning full time faculty. The system originated as a direct result of the need to complete the Full Time Faculty Salaries, Tenure, and Fringe Benefits section of the familiar, annual HEGIS report. This approach uses computer analysis as the methodological base for form completion. Data in the system were designed to optimize usefulness to the organization as well as fill the specific request.

This paper describes the design of the system, its methodology and a brief discussion of its use throughout the organization. Copies of the survey form, code schematic and computer analysis program are included in this report to allow for replication. Eighteen different data categories were designated as information needed to complete a wide range of internal and external requests for data about full time faculty. The Statistical Package for the Social Sciences (SPSS) was used to analyze the data.

In addition to internal data requirements, the Institutional Research Office responds to requests for data from peer institutions, governmental agencies and various Associations. This information system provides the Office with the vehicle necessary for timely and accurate reporting using minimal resources. The Office has also become more efficient and able to keep the academic and administrative officers well-informed.

TABLE OF CONTENTS

	Page
ABSTRACT	ii
INTRODUCTION	1
DESIGN OF THE SYSTEM	2
Assumptions	2
Population	2
Data Source	2
Data Analysis	3
METHODOLOGY	
Part 1 - Salaries and Tenure of Full-Time Instructional Faculty 1981-82	4
Part 2 - Fringe Benefits for Full-Time Instructional Faculty 1981-82 Men and Women	5
A - Retirement Plan	5
B - Other Fringe Benefits	6
Additional Data	
A. Salary Distribution Table	6
B. Department Listing	7
DISCUSSION	7
APPENDICES	
A. HEGIS XVI Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty, 1981-82	9
B. Code Schematic for Faculty Information System	15
C. Listing and Description of New Variables	16
D. SPSS Program Listing	17

INTRODUCTION

One of the responsibilities of the Institutional Research Office is to complete the Higher Education General Information Survey (HEGIS). This paper describes the development and implementation of a system used to complete the Salaries, Tenure and Fringe Benefits of Full-Time Instructional Faculty sections of the form. A copy of the form is in Appendix A beginning on page 9.

At one University prior to 1976 this form was diligently completed manually. Data verification and calculation were time consuming and the report could not easily be interpreted for additional uses. For 1977, 1978, and 1979, an external consultant prepared the HEGIS section using data supplied by the University. This arrangement was not efficient because the organization was not able to use the data beyond the report unless the consultant was involved.

An in-house development of a faculty information system was initiated during Fall, 1980 to alleviate the difficulties inherent in the previous methods. The data in the system were designed to optimize benefits to the organization as well as fill external data requests. Data concerning faculty rank, gender, age and degree earned are items which are frequently requested by peer institutions, governmental and accrediting agencies. Internal uses of faculty data include publications, public relations and development. This information system provides the means for timely and accurate reporting using minimal resources.

The organization of the paper includes the Design of the System, the Methodology and a brief Discussion. Appendices are attached to provide the reader with the information needed to replicate the process.

DESIGN OF THE SYSTEM

This section describes the assumptions, population, data source and data analysis used in the development of this system.

Assumptions

The following assumptions are germane:

1. The researcher has access to the Statistical Package for the Social Sciences (SPSS)
2. The researcher who uses the system has a working knowledge of SPSS or has staff who have such knowledge.

Population

The population included in the project consisted of all full time faculty, research associates, librarians and technicians employed by the University. The librarians and technicians were included because for some reporting requirements data pertaining to the groups were required. Inclusion of the four groups provided reporting flexibility for external as well as internal data requests.

Faculty in the Colleges/Schools of Architecture, Business & Administration, Education & Human Services, Engineering & Science, Law and Liberal Arts are covered by typical nine-month contracts. On the other hand, faculty in the School of Dentistry hold twelve month contracts. For purposes of the HEGIS report data for all full time instructional faculty from the seven colleges/schools were utilized. Since segments of the faculty held nine or twelve month contracts, all calculations had to be made twice.

Data Source

Data were obtained from files maintained in the Personnel and Payroll Offices. Information required for the HEGIS was not available from a single

source in a uniform format. Therefore, data categories were developed to provide the information needed for calculations. Data recorded for the group included:

1. assigned department
2. social security number
3. name
4. gender
5. ethnic origin
6. academic rank
7. tenure status
8. month and year hired
9. month and year born
10. highest earned degree
11. FYE 80 salary
12. FYE 81 salary
13. retirement plan enrollment
14. medical plan and option
15. dental plan and option
16. member of the Jesuit order
17. stipend for department chairs
18. leave of absence status

A coding scheme was prepared and data were entered accordingly for each member. The schematic arrangement facilitated the development of the computer program for data analysis. Due to the very confidential nature of the information gathered, only the person responsible for the completion of the report could access the raw data. A copy of the "Code Schematic for the Faculty Information System" is attached as Appendix B beginning on page 15. of this paper.

Data Analysis

The SPSS package was used as the base for the analysis because of its relative ease to learn and its widespread availability. Using the carefully documented code schematic as the base, an SPSS program was developed to analyze the data. A copy of the program is attached as Appendix D beginning on page 17. The flexibility of the package, allowing for manipulation of data categories, resulted in the generation of figures required for the HEGIS report. Frequency distributions, matrices, tabulations and transformations were used to produce the totals and numbers of cases needed to complete the form.

METHODOLOGY

This section presents the procedures used to complete the HEGIS form regarding full time instructional faculty. For a complete explanation of the SPSS commands used in this section (Recode, Breakdown, Crosstabs, Compute, Select If) refer to the manual.[1]

Fortunately, the form adopted for the 1981 HEGIS XVI report was simplified compared with previous years. The program listing (Appendix D) shows all of the procedures in order. New variables (31 thru 57) were created to compute the various fringe benefits according to costs. A list of commands and variable descriptions are contained in Appendix C beginning on page 16. The rest of this section presents the procedures used to complete both parts of the form.

Part 1 - Salaries and Tenure of Full-Time Instructional Faculty 1981-82

This section is divided into two categories. "A" is for faculty holding nine month contracts and "B" is for faculty holding twelve month contracts. In order to facilitate the calculations, the departments (VI) were permanently recoded to reflect the nine month faculty (values 1 and 2) and twelve month faculty (value 3) using the following command:

```
RECODE          V1(1 THRU 15,17 THRU 27=1)(30=2)(29,32=3)(ELSE=0)
MISSING VALUES V1(0)
```

The following two commands are required to complete Part 1:

1. Columns 1, 2, 4, and 6 of the table on Page 3 are completed using data from this command:

```
BREAKDOWN       VARIABLES=V18(1000,99999),V10(1,4),V8(1,2),V1(1,3)/
                TABLES=V18 by V10 by V8 by V1
```

[1] Norman H. Nie, et. al., Statistical Package for the Social Sciences, Second Edition, New York: McGraw-Hill, 1970.

The output of this "Breakdown" command consists of the sum, mean, standard deviation, variance and number of cases for the dependent variable (1981 salary) according to rank for each gender. In this instance the sums and numbers of cases are gleaned.

2. Columns 3 (tenured males) and 6 (tenured females) of page 3 are completed by the following:

```
*RECODE          V11(1=1)(ELSE=0)
MISSING VALUES   V11(0)
CROSSTABS        TABLES=V10 By V8 By V11 By V1
```

The department (V1) must be recoded to include only instructional/research faculty divided by contract length. Tenure status (V11) must include only tenured faculty arranged by gender and rank. Thus, non-instructional/research and non-tenured faculty are considered as missing observations for this category. The output produced by the command will be in the form of a matrix of academic rank defined by the rows across the characteristic gender defined by the columns.

PART 2 - Fringe Benefits for Full-Time Instructional Faculty 1981-82, Men and Women

Part 2 is also divided into the "A" and "B" categories. Care must be taken to keep the groups separate.

A. Retirement Plan

```
BREAKDOWN        VARIABLES=V31(100,9999),V10(1,4),V19(1,1),V1(1,1)/
                 TABLES =V31 By V10 By V19 By V1

BREAKDOWN        VARIABLES=V32(100,9999),V10(1,4),V19(1,1),V1(2,3)/
                 TABLES=V32 By V10 By V19 By V1
```

The output of the "Breakdown" commands yields sums of the premium for faculty who are enrolled in the retirement plan (TIAA-CREF) according to rank. Law (value 2) and Dentistry (value3) faculty retirement premiums are 8 percent of the 1981 salary. Therefore, the "Breakdown" command is run for each of the

three recoded groups separately. The newly created variables (31 and 32) calculate the premium for each case. Data for line 1 or 2, columns 1 thru 12 result.

B. Other Fringe Benefits

The above set of commands presents a sample of the calculation of one fringe benefit received by faculty at the University. Adjustments would be necessary to facilitate implementation by other institutions in order to accommodate specific benefits and costs. Therefore, the remaining calculations for Part 2 will not be presented. Rather, a listing and explanation of variables 31 thru 57 is provided in order to facilitate understanding of the commands used to complete the Fringe Benefits portion on pages 4 and 5. The listing is attached as Appendix C on page 16.

The Tuition Plan (line5), housing Plan (line 6), and Other (line 11) categories do not at this time apply to the University and are, therefore, not completed. After all figures are inserted on the appropriate lines and columns of Part 2A & 2B, line 12 is calculated for each page. At this point the form is complete. Verification of all figures marks the end of the project.

Additional Data

A. Salary Distribution Table

Prior to the 1981 reporting year, the form included a distribution of 55 salary categories by rank and gender. Even though the HEGIS report no longer requires this table the AAUP salary request form does include the table. The following command will yield salary by rank for males and salary by rank for females. Nine and twelve month contract groups are reported separately as in previous salary sections.

```
*SELECT IF      (V1 EQ 1 OR V1 EQ 2)
CROSSTABS       TABLES=V18 By V10 By V8

*SELECT IF      (V1 EQ 3)
CROSSTABS       TABLES=V18 By V10 By V8
```

B. Department Listing

Release 8 of SPSS has a "Report" feature.[1] The procedure enables a researcher to prepare lists of faculty divided according to specified variables. Appendix D contains a listing of a Report command sequence developed for in-house use by the Personnel and Budget Offices. Each department is listed separately with the following data given for full time faculty in the department:

Name	Hospital Plan and Option
Rank	Dental Plan and Option
Retirement	Age
	Leave Status

A variety of variable combinations can be arranged to fit specific needs. It can be especially helpful for data verification.

DISCUSSION

Completion of the HEGIS form concerning faculty salaries and fringe benefits was the primary purpose of the development of the system described herein. The system has been used for two reporting cycles, 1980 and 1981. During that time refinements were made to facilitate data use. The institution now has a procedure established whereby the form can be correctly and efficiently completed. In addition the information forms the data base used in several other reports generated for internal as well as other external sources.

Availability of the data has proven to be an asset to IR. The Office is able to provide various units throughout the organization with a wide range of information concerning full time faculty. Public Relations and Publication staff members were able to update their files. Information needed by the Development Office was easily obtained and was provided using various

[1] C. Hadlai Hull and Norman H. Nie, SPSS Update - New Procedures and Facilities for Releases 7 and 8, New York: McGraw-Hill, 1979.

groupings. The Academic Affairs Office benefited by the notice of pending retirements as well as demographic descriptions of faculty for each department. For example, the following data tables were prepared using information as analyzed by use of the SPSS procedures:

1. Full Time Faculty Headcount Arranged by Rank, Gender and College/School
2. Average Salaries for Full Time Faculty Arranged by Rank, Campus and Gender
3. Minimum, Maximum and Average Salaries for Full Time Faculty Arranged by Rank and Campus
4. Full Time Faculty Headcount Arranged by College/School and Department According to Rank, Percent Having Doctorate and Tenure
5. Women's Average Salary as a Percentage of Men's Arranged by Rank and Campus

The Personnel and Budget & Financial Analysis Offices were able to effectively use the information also. Fiscal implications created by salary and benefit increments could easily be accomplished for a wide range of groups in the population. This was particularly important during recent negotiations of the faculty contract. Interim financial reporting was also facilitated by calculations of fringe benefit costs among the various units.

Minor coding adjustments might be necessary to fit the needs of other organizations. Modifications should not preclude implementation of the system and methodology used to complete the specific HEGIS form. This approach would be particularly useful in institutions which do not have the benefit of sophisticated analysis packages or the services of computer programming personnel.

UNITED STATES DEPARTMENT OF EDUCATION
WASHINGTON, D.C. 20202

HIGHER EDUCATION GENERAL INFORMATION SURVEY *(HEGIS XVI)*

SALARIES, TENURE, AND FRINGE BENEFITS OF FULL-TIME INSTRUCTIONAL FACULTY, 1981-82

PLEASE READ INSTRUCTIONS BEFORE COMPLETING THIS FORM.

FORM APPROVED
OMB NO. 1850-0003
EXPIRATION DATE: 7/31/82

1. FICE CODE NUMBER

2. DUE DATE

Not later than November 30, 1981

This report is authorized by law (20 U.S.C. 1221e-1). While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate and timely.

Please supply all the identifying information requested on this page. When the survey form has been completed, please return it either directly to the U.S. Department of Education, National Center for Education Statistics, 400 Maryland Avenue, S.W., (Presidential Building, Suite 205, Attention: HEGIS), Washington, D.C. 20202, or to the HEGIS COORDINATOR, if there is a HEGIS coordinator in your State.

3. FROM
UNIVERSITY OF DETROIT
4001 WEST MCNICHOLS ROAD
DETROIT MI 48221

4. NAME AND TITLE OF RESPONDENT

5. TELEPHONE NUMBER OF RESPONDENT *(area code, local number, and extension)*

6. **PLEASE NOTE** THAT EACH INSTITUTION, BRANCH, CAMPUS OR OTHER ENTITY SEPARATELY CERTIFIED BY THE DIVISION OF ELIGIBILITY AND AGENCY EVALUATION OF THE U.S. DEPARTMENT OF EDUCATION, WITH ITS OWN FICE CODE, AND LISTED SEPARATELY IN THE **EDUCATION DIRECTORY – COLLEGES AND UNIVERSITIES**, SHOULD BE REPORTED ON A SEPARATE SURVEY FORM AND NOT INCLUDED OR COMBINED WITH ANY OTHER SUCH CERTIFIED UNIT. BRANCHES, CAMPUSES, AND OTHER ORGANIZATIONAL ENTITIES NOT SEPARATELY CERTIFIED SHOULD BE INCLUDED WITH THE APPROPRIATE INSTITUTION OR BRANCH REPORT. IF SUCH ARE INCLUDED IN THIS REPORT, PLEASE LIST THEM BELOW.

ARE DATA FOR THIS UNIT INCLUDED IN THIS REPORT?	NAME OF BRANCH AND/OR OTHER CAMPUS	ADDRESS *(city, State, and ZIP code)*
☐ YES ☐ NO		
☐ YES ☐ NO		
☐ YES ☐ NO		

7. IF THE EDUCATIONAL ORGANIZATION OR ENTITY COVERED BY THIS SURVEY REPORT IS PART OF A MULTI-CAMPUS INSTITUTION, OR PART OF A SYSTEM OF INSTITUTIONS, PLEASE ENTER THE NAME OF THE INSTITUTION OR SYSTEM BELOW. IF NOT APPLICABLE, CHECK HERE → ☐

DEFINITIONS

INSTITUTIONAL SYSTEM. A complex of two or more institutions of higher education, each separately organized or independently administered, under the control of a single administrative body.

MULTI-CAMPUS INSTITUTION. An organization resembling an institutional system, but clearly designated as a single institution with either of two organizational structures: (1) an institution having two or more campuses responsible to a central administration (which central administration may or may not be located on one of the administratively equal campuses) or (2) an institution having a main campus with one or more branch campuses.

MAIN CAMPUS. In those institutions comprised of a main campus and one or more branch campuses, the main campus (sometimes called the parent institution) is usually the location of the core, primary, or most comprehensive program. (Unless the institution-wide or central administrative office for such institutions is reported to be at a different location, the main campus is understood to be the location of the central administrative office.)

BRANCH CAMPUS. A campus of an institution of higher education which is located in a community different from that of its parent institution, that is, beyond a reasonable commuting distance from the main campus of the parent institution. To be considered a branch campus, rather than an extension center, the educational activities at the location must be organized on a relatively permanent basis (i.e., have a relatively permanent administration) and include course offerings for one or more complete college-level programs of at least one full year.

NAME OF INSTITUTION | 1. FICE CODE NUMBER

PART 1 – SALARIES, AND TENURE OF FULL-TIME INSTRUCTIONAL FACULTY, 1981-82

A. FACULTY ON 9-MONTH SALARY CONTRACTS

ACADEMIC RANK	MEN			WOMEN		
	NUMBER OF PERSONS (1)	TOTAL SALARY OUTLAY (OMIT CENTS) (2)	NO. IN COL. 1 WITH TENURE (3)	NUMBER OF PERSONS (4)	TOTAL SALARY OUTLAY (OMIT CENTS) (5)	NO. IN COL. 5 WITH TENURE (6)
1. PROFESSORS						
2. ASSOCIATE PROFESSORS						
3. ASSISTANT PROFESSORS						
4. INSTRUCTORS						
5. LECTURERS						
6. NO ACADEMIC RANK*						
7. TOTAL (sum of lines 1-6)						

B. FACULTY ON 12-MONTH SALARY CONTRACTS

ACADEMIC RANK	MEN			WOMEN		
	NUMBER OF PERSONS (1)	TOTAL SALARY OUTLAY (OMIT CENTS) (2)	NO. IN COL. 1 WITH TENURE (3)	NUMBER OF PERSONS (4)	TOTAL SALARY OUTLAY (OMIT CENTS) (5)	NO. IN COL. 5 WITH TENURE (6)
8. PROFESSORS						
9. ASSOCIATE PROFESSORS						
10. ASSISTANT PROFESSORS						
11. INSTRUCTORS						
12. LECTURERS						
13. NO ACADEMIC RANK*						
14. TOTAL (sum of lines 8-13)						

15. IF THIS SURVEY IS NOT APPLICABLE TO YOUR INSTITUTION BECAUSE THE EXCLUSIONS CITED IN THE DEFINITIONS EMBRACE ALL OF YOUR INSTRUCTIONAL FACULTY, PLEASE MARK THE APPROPRIATE ITEM BELOW AND RETURN THIS PAGE WITH PAGE 1.

☐ (1) ALL OF THE INSTRUCTIONAL FACULTY AT THIS INSTITUTION ARE PAID UNDER CONTRACTS OTHER THAN 9 OR 11/12 MONTH DURATION.

15 ☐ (2) ALL INSTRUCTIONAL FACULTY AT THIS INSTITUTION TEACH PRECLINICAL OR CLINICAL MEDICINE.

☐ (3) ALL OF THE INSTRUCTIONAL FACULTY AT THIS INSTITUTION ARE EMPLOYED ON A PART-TIME BASIS. 10

☐ (4) ALL OF THE INSTRUCTIONAL FACULTY AT THIS INSTITUTION ARE MEMBERS OF A RELIGIOUS ORDER AND CONTRIBUTE SERVICES OR ARE MILITARY PERSONNEL 16

**Institutions without standard academic ranks should report all full-time faculty here.*

NAME OF INSTITUTION | 1. FICE CODE NUMBER

PART 2A – FRINGE BENEFITS FOR FULL-TIME INSTRUCTIONAL FACULTY ON 9-MONTH SALARY CONTRACTS, 1981-82, MEN AND WOMEN

(In "Expenditure" columns, report only whole dollar amounts; omit cents)

FRINGE BENEFITS	LINE NO.	PROFESSORS		ASSOCIATE PROFESSORS		ASSISTANT PROFESSORS		INSTRUCTORS		LECTURERS		NO ACADEMIC RANK	
		EXPENDITURE (1)	NO. COV. (2)	EXPENDITURE (3)	NO. COV. (4)	EXPENDITURE (5)	NO. COV. (6)	EXPENDITURE (7)	NO. COV. (8)	EXPENDITURE (9)	NO. COV. (10)	EXPENDITURE (11)	NO. COV. (12)
RETIREMENT PLANS (Other than Social Security) A. Vested within 5 years	1												
B. Vested after 5 years	2												
MEDICAL/DENTAL PLANS	3												
GUARANTEED DISABILITY INCOME PROTECTION	4												
TUITION PLAN RESTRICTED ☐YES ☐NO (see instruction for line 5)	5												
HOUSING PLAN RESTRICTED ☐YES ☐NO (see instruction for line 6)	6												
SOCIAL SECURITY TAXES	7												
UNEMPLOYMENT COMPENSATION TAXES	8												
GROUP LIFE INSURANCE	9												
WORKMEN'S COMPENSATION	10												
OTHER BENEFITS IN KIND WITH CASH OPTIONS (specify)	11												
TOTALS (see instructions for line 12)	12												

REMARKS

17

18

11

NAME OF INSTITUTION | 1. FICE CODE NUMBER

PART 2B – FRINGE BENEFITS FOR FULL-TIME INSTRUCTIONAL FACULTY ON 12-MONTH SALARY CONTRACTS, 1981-82, MEN AND WOMEN

(In "Expenditure" columns, report only whole dollar amounts; omit cents)

FRINGE BENEFITS	LINE NO.	PROFESSORS		ASSOCIATE PROFESSORS		ASSISTANT PROFESSORS		INSTRUCTORS		LECTURERS		NO ACADEMIC RANK	
		EXPENDITURE (1)	NO. COV. (2)	EXPENDITURE (3)	NO. COV. (4)	EXPENDITURE (5)	NO. COV. (6)	EXPENDITURE (7)	NO. COV. (8)	EXPENDITURE (9)	NO. COV. (10)	EXPENDITURE (11)	NO. COV. (12)
RETIREMENT PLANS *(Other than Social Security)* A. Vested within 5 years	1												
B. Vested after 5 years	2												
MEDICAL/DENTAL PLANS	3												
GUARANTEED DISABILITY INCOME PROTECTION	4												
TUITION PLAN RESTRICTED ☐ YES ☐ NO *(see instruction for line 5)*	5												
HOUSING PLAN RESTRICTED ☐ YES ☐ NO *(see instruction for line 6)*	6												
SOCIAL SECURITY TAXES	7												
UNEMPLOYMENT COMPENSATION TAXES	8												
GROUP LIFE INSURANCE	9												
WORKMEN'S COMPENSATION	10												
OTHER BENEFITS IN KIND WITH CASH OPTIONS *(specify)*	11												
TOTALS (see instructions for line 12)	12												

REMARKS

13

20

12

INSTRUCTIONS FOR COMPLETING SALARIES, TENURE, AND FRINGE BENEFITS OF FULL-TIME INSTRUCTIONAL FACULTY, 1981-82

OMB NO. 1850-0003
EXPIRATION DATE: 7/31/82

DEFINITIONS

Instructional Faculty. For purposes of this part of the survey, the instructional faculty is defined as those members of the Instruction/Research staff who are employed full-time as defined by the institution and whose **major regular assignment is instruction, including those with released time for research.** Instructional faculty on sabbatical leave should be reported at their regular salaries even though the faculty member may be receiving a reduced annuity while on leave. Replacements for those on sabbatical leave should not be reported. Faculty on leave without pay should not be reported. Full-time replacements for those on leave without pay should be reported. Chairmen of departments should be reported (if they have no other administrative title and hold a faculty rank) at their contracted faculty salary.

Salary Contracts. Report the salaries of faculty on either 9-month or 12-month bases. For purposes of this survey, the term 9-month salary applies to faculty who teach for two semesters, three quarters, two trimesters, two four-month sessions or the equivalent. Those faculty members teaching on any of these bases should be reported in the section of this part of the survey entitled 9-month salaries. Faculty employed for the entire year should be reported in the section of the form entitled 12-month salaries. These faculty members are usually employed for 11 months of teaching with one month of vacation. Faculty should be reported as having 9-month or 12-month salaries on the basis of the contract period, not on the basis of the number of installments in which salaries are paid. If the conditions of employment of all of the faculty at your institution are other than those defined here, or your institution is a medical school, see the exclusions below.

Tenure. Of the number of instructional faculty being reported at each rank, also report the number who have tenure at each of those ranks. If a position is tenured, but the person holding it has not yet earned the tenure privilege, the person should not be counted as having tenure. Furthermore, do not count tenured persons as having tenure if their salaries were not included in the total salary outlay for that academic rank. If none of the instructional faculty at a particular rank are tenured, please enter a zero in that space.

Exclusions. Do not report the number of faculty, their salaries, or the number tenured, for any of the groups of employees listed below:

(1) Instructional faculty who are employed to teach less than two semesters, three quarters, two trimesters, or two 4-month sessions. If this statement applies to all instructional faculty at your institution, please indicate at the bottom of page 3.

(2) Instructional faculty for preclinical and clinical medicine. If this statement applies to all instructional faculty at your institution, please indicate at the bottom of page 3. *(NOTE: Instructional faculty in all other health fields, such as dentistry, veterinary medicine, nursing, dental hygiene, etc., should be reported.)*

(3) Instructional faculty who are employed on a part-time basis. If this statement applies to all instructional faculty at your institution, please indicate at the bottom of page 3.

(4) Instructional faculty (such as members of religious orders) whose services are valued by bookkeeping entries rather than by full cash transactions.

(5) Instructional faculty who, as members of military organizations, are paid on a different salary scale from civilian employees.

(6) Administrative officers with titles such as Dean of Instruction, Academic Dean, Dean of Faculty, Dean of Students, Librarian, Registrar, Coach, etc., even though they may devote part of their time to classroom instruction.

(7) Undergraduate or graduate students who assist in the instruction of courses, but have titles such as teaching assistant, teaching associate, teaching fellow, etc.

INSTRUCTIONS

PART 1 – SALARIES AND TENURE OF FULL-TIME INSTRUCTIONAL FACULTY, 1981-82

In Part 1A, page 3, column 1, report the number of male faculty members on 9-month salaries according to their academic ranks. In column 2, report to the nearest whole dollar, the total salary outlay for those faculty members reported in column 1. Report in column 3 the number of faculty members reported in column 1 who currently have tenure privileges. Similarly, report the data for female faculty members on 9-month salaries in columns 4-6.

In Part 1B, page 3, report data for faculty on 12-month salaries.

PART 2 – FRINGE BENEFITS FOR FULL-TIME INSTRUCTIONAL FACULTY, 1981-82, MEN AND WOMEN

Report the projected fringe-benefits expenditures which will be paid by your institution, or State, to the full-time instructional faculty during the 1981-82 academic year. Fringe benefits should be reported only for those salaried instructional faculty reported in Part 1 of this survey. The fringe benefits for male and female faculty on 9-month contracts, as reported in columns 1 and 4, lines 1-6 of Part 1A (page 3), should be reported in Part 2A. Similarly, the fringe benefits for male and female faculty on 12-month contracts reported in columns 1 and 4, lines 8-13 of Part 1B (page 3), should be reported in Part 2B. The exclusions cited in the instructions for Part 1 also apply to Parts 2A and 2B.

Fringe benefits are defined as cash contributions in the form of supplementary or deferred compensation other than salary. The employee's contribution should be excluded when determining the dollar value of fringe benefits. Expenditures should be reported to the nearest whole dollar. When an expenditure is reported for a fringe benefit, the number of persons receiving the benefit should also be reported.

Lines 1 and 2. Retirement Plans (other than Social Security). Report contributions by your institution, State and local government toward retirement on line 1 or 2 according to the vesting provisions of the institution's retirement plan. A vested retirement plan is defined as one in which the full amount of the contribution by the institution, State and local government, with accumulations thereon, will be made available as a benefit in case of death while in service and with no forfeiture in case of resignation or dismissal from the institution.

On line 1, report contributions toward retirement if they become vested in the faculty member not later than the end of his 5th year of full-time service at the institution and are not lost to him if he leaves the institution or moves to another State. If the institution's retirement vesting provision meets the 5-year criterion, report all contributions to the retirement plan on line 1 even though some faculty members may have been employed less than 5 years.

On line 2, report expenditure for retirement plans in which the employer's contribution becomes vested in the faculty member after 5 years or only upon retirement.

Line 3. Medical/Dental Plans. Report contributions to insurance plans which provide for hospital, medical, surgical, or dental care.

Line 4. Guaranteed Disability Income Protection Plan. Report expenditures, through insurance or otherwise, for long-term disability income payments (defined as salary in excess of 6 months) and not covered in other retirement or insurance plans listed on this form. These payments are not to consist of the accumulation of unused sick-leave benefits.

Line 5. Tuition Plan. Report cash payments and the dollar value of tuition waivers and exchanges for dependents of faculty members to attend another institution or your own institution. If the tuition plan is available to dependents of faculty members to attend any institution of their choice, please check "No" on line 5. If either of these conditions does not apply, please check "YES" on line 5. The number covered by this benefit should be the number of faculty dependents receiving tuition, rather than the number of faculty members covered by the benefits. If the number of faculty dependents who will receive this benefit in 1981-82 is unknown when this report is being prepared, apply the current rate for the benefit to the number receiving tuition in 1980-81 to derive an estimate.

Line 6. Housing Plan. Report the expenditures in the form of cash payments or subsidies to faculty members for off-campus or institution-owned housing. If faculty members have the option of choosing off-campus housing, please check "NO" on line 6. If the housing plan only applies to institution-owned housing, please check "YES" on line 6 If the number of faculty members who will receive the housing benefit in 1981-82 is unknown when this report is being prepared, apply the current rate for this benefit to the number receiving the housing benefit in 1980-81 to derive an estimate.

Line 7. Social Security Taxes. If covered by Social Security, report the F.I.C.A. taxes calculated at the rate effective January 1, 1981 (6.65% of the first $29,700 or $1,975 maximum earned per employee).

Line 8. Unemployment Compensation Taxes. Report the taxes (not benefits) to be paid under this law. If the institution is self-insured, report the estimated amount which would otherwise be paid to the State.

Line 9. Group Life Insurance. Report expenditures by the institution to support the group life insurance program.

Line 10. Workmen's Compensation. Report the taxes (not benefits) to be paid under this law. If the institution is self-insured, report the estimated amount which would otherwise be paid to the State.

Line 11. Other Benefits In Kind With Cash Options. Personal benefits in kind are reported only if the faculty member has, without the imposition of conditions, the option of taking a cash payment if the person prefers to use the money in some other way. Since the objective is the measurement of income available for personal consumption, as distinct from professional purposes, benefits of a professional nature (such as convention travel, membership fees, grading assistance, faculty clubs, etc.) should not be included.

Line 12. Totals. Sum the figures reported in each of the "Expenditure" columns.

The total "Number Covered" is an unduplicated count of persons participating in one or more benefit plans; not the sum of all figures reported in each of the "Number Covered" columns.

In the interest of consistent reporting, please verify that the number covered on each line of Part 2 does not exceed the corresponding number of men plus women reported in Part 1. For example, the "number covered" in Part 2A, line 1, column 2 should not exceed the number of persons reported in Part 1A (page 3, line 1, column 1 plus column 4). However, the number covered by the tuition plan, line 5, Part 2, may exceed the corresponding number of persons reported in Part 1 when faculty members have more than one dependent receiving tuition.

CODE SCHEMATIC FOR FACULTY INFORMATION SYSTEM

COLUMN	VARIABLE NUMBER	VARIABLE NAME	CONTENT
1-2	1	Department	01 Comm. Studies 02 Poli. Science 03 Psychology 04 Soc./Social Wk. 05 Black Studies 06 English 07 History 08 Lang. & Ling. 09 Performing Arts 10 Philosophy 11 Religious Stu. 12 Civil Engr. 13 Chemical Engr. 14 Electrical Engr. 15 Mechanical Engr. 16 Polymer Inst. 17 Biology 18 Chemistry 19 Physics 20 Mathematics 21 Econ. & Mgt. Science 22 Accounting & Finance 23 Organizational Admin. 24 Architecture 25 Criminal Justice 26 Education 27 Physical & Health Educ 28 Library 29 Dentistry 30 Law 31 Technician 32 D. Hygiene
3-11	2	Soc. Sec. No.	Nine digit numeric with no hyphens
12-31	3-7	Faculty Name	Last Name (space) First Initial
32	8	Gender	1 = Female 2 = Male
33	9	Ethnic Origin	1 Amer. Ind./Alasken 2 White 3 Black 4 Asian/Pacific Island 5 Hispanic 6 International
34-35	10	Academic Rank	01 Professor 02 Assoc. Prof. 03 Asst. Prof. 04 Instructor 05 Lecturer 06 Librarian 1 07 Librarian 2 08 Librarian 3 09 Visiting Professor 10 Technician
36	11	Tenure	1 = Yes 2 = No 3 = Non-tenure track 4 = Probationary
37-38	12	Month Hired	2 digits 01 to 12
39-40	13	Year Hired	Last 2 digits (e.g. 74, 62, 41)
41-42	14	Birth Month	2 digits 01 to 12
43-44	15	Birth Year	Last 2 digits (e.g. 40, 22, 38)
45-46	16	Highest Earned Degr.	01 Ph.D. 02 Ed.D. 03 D.B.A. 04 D. Eng. 05 MBA 06 MFA 07 MSW 08 MS/MA 09 Bachelor 10 M.L.S. 11 D.D.S. 12 J.D. 13 Technical 14 LLM 15 MCL 16 Inter'n-Masters 17 DMD
47-51	17	1980 Salary	A 5 digit number (right justified)
52-56	18	1981 Salary	A 5 digit number (right justified)
57	19	Retirement Plan	1 = Yes Blank = No
60	20	Hospital Plan	1 = Blue Cross/Blue Shield 2 = Group Health Plan 3=Health All. Plan 4=Independ. Plan Blank = None
61	21	Hospital Option	1=Single 2=Married 3=Family
62	22	Dental Plan	1=Yes Blank=No
63	23	Dental Option	1=Single 2=Married 3=Family
64	24	Jesuit	1 = Yes Blank = No
65-68	25	Chair's Stipend	A 4 digit number (right justified)
69	26	On Leave 1980-81	1 = Leave of Absence 2 = Research Leave 3 = 1 or 2 terms duration 4 = Disability
70	27	On Leave 1981-82	

APPENDIX C
LISTING AND DESCRIPTION OF NEW VARIABLES

New variables were created to complete Part 2 of the form. The Commands employed and Content Descriptions are as follows:

Command		Content Description
Compute	V31=.1*V18	Yearly TIAA-CREF premium per person for UDPU faculty
Compute	V32=.08*V18	Yearly TIAA-CREF premium per person for non UDPU faculty
Compute	V35=V18*.0665	FICA taxes
Compute	V36=V18/1000	Salary divided by 1000 to determine a base
Compute	V37=.34*12	Yearly rate of Life Insurance premium
Compute	V38=V36*V37	Per person Life Insurance premium for one year
Compute	V39=5.97*12	Yearly individual premium for Dental Plan-single option
Compute	V40=12.09*12	Yearly individual premium for Dental Plan-married option
Compute	V41=17.02*12	Yearly individual premium for Dental Plan-family option
Compute	V42=V18/100	Salary divided by 100 to determine a base
Compute	V43=V42*.39	Yearly per person premium for Workmen's Compensation
Compute	V44=V18/1000	Salary divided by 1000 to determine a base
Compute	V45=4.27*12	Base for Disability Insurance premium per person for "Continuing" faculty in TIAA-CREF
Compute	V46=10.55*12	Base for Disability Insurance premium per person for "Continuing" faculty not in TIAA-CREF
Compute	V47=V44*V45	Yearly Disability Insurance premium per policy for "Continuing" faculty in TIAA-CREF
Compute	V48=V44*V46	Yearly Disability Insurance premium per policy for "Continuing" faculty not in TIAA-CREF
Compute	V50=68.12*12	Yearly BC/BS premium per policy - single option
Compute	V51=101.67*12	Yearly BC/BS premium per policy - for UDPU faculty-married option
Compute	V52=110.28*12	Yearly BC/BS premium per policy-for UDPU faculty-family option
Compute	V53=113.20*12	Yearly BC/BS premium per policy-non UDPU faculty-married option
Compute	V54=122.42*12	Yearly BC/BS premium per policy-non UDPU faculty-family option
Compute	V55=52.30*12	Yearly Group Health Plan premium per policy-single option
Compute	V56=94.82*12	Yearly Group Health Plan premium per policy-family option
Compute	V57=59.91*12	Yearly Health Alliance Plan premium per policy-single option

APPENDIX D

SPSS PROGRAM LISTING

```
FILE NAME       FACULTY
PAGESIZE        NOEJECT
VARIABLE LIST   V1 TO V27
INPUT FORMAT    FIXED(F2.0,F9.0,5A4,2F1.0,F2.0,F1.0,5F2.0,
                2F5.0,F1.0,2X,5F1.0,F4.0,2F1.0)
INPUT MEDIUM    CARD
N OF CASES      UNKNOWN
VAR LABELS      V1,DEPARTMENT/V2,SOC SEC NUMBER/
                V3,R/V4,A/V5,M/V6,E/V7,S/V8,GENDER/
                V9,ETHNIC ORIGIN/V10,RANK/V11,TENURE STATUS/
                V12,MONTH HIRED/V13,YEAR HIRED/
                V14,BIRTH MONTH/V15,BIRTH YEAR/
                V16,DEGREE/V17,FYE80 SALARY/
                V18,FYE81 SALARY/V19,TIAA CREF/
                V20,HOSPITAL PLAN/V21,HOSPITAL OPTION/
                V22,DENTAL/V23,DENTAL OPTION/V24,JESUIT/
                V25,CHAIR STIPEND/V26,LEAVE 1980/V27,LOA 1981
VALUE LABELS    V1(1)COMM STUDIES(2)POLI SCI(3)PSYCH(4)SOC SW(5)BS
                (6)ENGLISH(7)HISTORY(8)LANG(9)PERF ARTS(10)PHIL
                (11)RELIG STUD(12)CIVIL E(13)CHEM E(14)ELECT E
                (15)MECH E(16)POLYMER(17)BIOLOGY(18)CHEM(19)PHYSICS
                (20)MATH(21)ECON&MGT(22)ACC&FIN(23)CHB&MKT
                (24)ARCH(25)CRIM J(26)EDUCATION(27)HEALTH&PHYSED
                (28)LIBRARY(29)DENTISTRY(30)LAW
                (31)TECHNICIANS(32)D HYGIENE/
                V8 (1)FEMALE(2)MALE/ V9 (1)INDIAN(2)WHITE(3)BLACK
                (4)ASIAN(5)HISPANIC(6)INTERNATL/
                V10(1)PROF(2)ASSOC PROF(3)ASST PROF(4)INSTR
                (5)LECTURER(6)LIB 1(7)LIB 2(8)LIB 3
                (9)VISIT PROF(10)TECH/V11(1)YES(2)NO(3)NON TTRACK
                (4)PROBATION/V16(1)PH D(2)ED D(3)DBA(4)D ENG
                (5)MBA(6)MFA(7)MSW(8)MS&MA(9)BACHELOR(10)MLS
```

```
                (11)DDS(12)JD(13)TECH(14)LLM(15)MCL(16)INTERN MASTER/
                V20(1)BC&BS(2)GROUP HEALTH(3)HEALTH ALLIANCE(4)INDEP PLAN/
                V21(1)SINGLE(2)MARRIED(3)FAMILY/
                V23(1)SINGLE(2)MARRIED(3)FAMILY/
                V26(1)LOA(2)RESEARCH(3)1 OR 2TERM(4)DISABILITY/
                V27(1)LOA(2)RESEARCH(3)1 OR 2TERM(4)DISABILITY/
PRINT FORMATS   V3,V4,V5,V6,V7(A)
COMPUTE         V28=81-V15
MISSING VALUES V28(81)
VAR LABEL       V28,AGE
COMPUTE         V29=81-V13
MISSING VALUES V29(81)
VAR LABEL       V29,YEARS OF SERVICE
RECODE          V10(3,9=3)
COMPUTE         V30=V1
RECODE          V30(1 THRU 11=1)(12 THRU 15=2)(17 THRU 20=3)(21 THRU 23=4)
                (24=5)(25 THRU 27=6)(28=7)(29=8)
                (30=9)(31=10)(32=11)(16=12)
VALUE LABELS    V30(1)LIBERAL ARTS(2)ENGINEERING(3)SCIENCE
                (4)BUSINESS ADM(5)ARCHITECTURE(6)EDUCATION HS(7)LIBRARY
                (8)DENTISTRY(9)LAW(10)TECHNICIANS
                (11)DENTAL HYGIENE(12)POLYMER
RECODE          V13(81=0)(ELSE=1)
VALUE LABELS    V13(1)CONTINUING FACULTY
COMPUTE         V31=.1*V18
COMPUTE         V32=.08*V18
COMPUTE         V35=V18*.0665
COMPUTE         V36=V18/1000
COMPUTE         V37=.34*12
COMPUTE         V38=V36*V37
COMPUTE         V39=5.97*12
COMPUTE         V40=12.09*12
COMPUTE         V41=17.02*12
COMPUTE         V42=V18/100
COMPUTE         V43=V42*.39
COMPUTE         V44=V18/1000
```

```
COMPUTE         V45=4.27*12
COMPUTE         V46=10.55*12
COMPUTE         V47=V44*V45
COMPUTE         V48=V44*V46
COMPUTE         V50=68.12*12
COMPUTE         V51=101.67*12
COMPUTE         V52=110.28*12
COMPUTE         V53=113.20*12
COMPUTE         V54=122.42*12
COMPUTE         V55=52.30*12
COMPUTE         V56=94.82*12
COMPUTE         V57=52.91*12
SELECT IF       (V27 EQ 0)
RECODE          V1(1 THRU 15,17 THRU 27=1)(30=2)(29,32=3)(ELSE=0)
MISSING VALUES  V1(0)
BREAKDOWN       VARIABLES=V18(1000,99999),V10(1,4),V8(1,2),V1(1,3)/
                TABLES=V18 BY V10 BY V8 BY V1
READ INPUT DATA
END INPUT DATA
*RECODE         V11(1=1)(ELSE=0)
MISSING VALUES  V11(0)
CROSSTABS       TABLES=V10 BY V8 BY V11 BY V1
*SELECT IF      (V1 EQ 1)
BREAKDOWN       VARIABLES=V31(100,9999),V10(1,4),V19(1,1)/
                TABLES=V31 BY V10 BY V19
*SELECT IF      (V1 EQ 2)
BREAKDOWN       VARIABLES=V32(100,9999),V10(1,4),V19(1,1)/
                TABLES=V32 BY V10 BY V19
*SELECT IF      (V1 EQ 3)
BREAKDOWN       VARIABLES=V32(100,9999),V10(1,4),V19(1,1)/
                TABLES=V32 BY V10 BY V19
*SELECT IF      (V1 EQ 1 OR V1 EQ 2)
*RECODE         V18(29701 THRU 99999=1)(ELSE=0)
MISSING VALUES  V18(0)
CROSSTABS       TABLES=V10 BY V18
```

```
*SELECT IF      (V1 EQ 1 OR V1 EQ 2)
*RECODE         V18(29701 THRU 99999=1)(ELSE=0)
MISSING VALUES V18(0)
BREAKDOWN       TABLES=V35 BY V10 BY V18
*SELECT IF      (V1 EQ 3)
*RECODE         V18(29701 THRU 99999=1)(ELSE=0)
MISSING VALUES V18(0)
CROSSTABS       TABLES=V10 BY V18
*SELECT IF      (V1 EQ 3)
*RECODE         V18(29701 THRU 99999=1)(ELSE=0)
MISSING VALUES V18(0)
BREAKDOWN       TABLES=V35 BY V10 BY V18
*SELECT IF      (V1 EQ 1 OR V1 EQ 2)
BREAKDOWN       TABLES=V38 BY V10
*SELECT IF      (V1 EQ 3)
BREAKDOWN       TABLES=V38 BY V10
*SELECT IF      (V1 EQ 1 OR V1 EQ 2)
*SELECT IF      (V22 EQ 1)
*SELECT IF      (V23 EQ 1)
BREAKDOWN       TABLES=V39 BY V10 BY V22 BY V23 BY V1
*SELECT IF      (V1 EQ 1 OR V1 EQ 2)
*SELECT IF      (V22 EQ 1)
*SELECT IF      (V23 EQ 1)
BREAKDOWN       TABLES=V40 BY V10 BY V22 BY V23 BY V1
*SELECT IF      (V1 EQ 1 OR V1 EQ 2)
*SELECT IF      (V22 EQ 1)
*SELECT IF      (V23 EQ 1)
BREAKDOWN       TABLES=V41 BY V10 BY V22 BY V23 BY V1
*SELECT IF      (V1 EQ 1 OR V1 EQ 2)
BREAKDOWN       TABLES=V43 BY V10
*SELECT IF      (V1 EQ 3)
BREAKDOWN       TABLES=V43 BY V10
*SELECT IF      (V1 EQ 1)
*SELECT IF      (V20 EQ 1 AND V21 EQ 1)
BREAKDOWN       TABLES=V50 BY V10 BY V1
```

```
*SELECT IF      (V1 EQ 1)
*SELECT IF      (V2C EQ 1 AND V21 EQ 1)
*SELECT IF      (V22 EQ 1 AND V23 EQ 2)
BREAKDOWN       TABLES=V51 BY V10 BY V1
*SELECT IF      (V1 EQ 1)
*SELECT IF      (V2C EQ 1 AND V21 EQ 1)
BREAKDOWN       TABLES=V52 BY V10 BY V1
*SELECT IF      (V1 EQ 1)
*SELECT IF      (V2C EQ 2 AND V21 EQ 2)
BREAKDOWN       TABLES=V52 BY V10 BY V1
*SELECT IF      (V1 EQ 1)
*SELECT IF      (V2C EQ 2 AND V21 EQ 3)
BREAKDOWN       TABLES=V51 BY V10 BY V1
*SELECT IF      (V1 EQ 1)
*SELECT IF      (V2C EQ 2 AND V21 EQ 3)
BREAKDOWN       TABLES=V52 BY V10 BY V1
*SELECT IF      (V1 EQ 2)
*SELECT IF      (V2C EQ 1 AND V21 EQ 1)
BREAKDOWN       TABLES=V50 BY V10 BY V1
*SELECT IF      (V1 EQ 2)
*SELECT IF      (V2C EQ 1 AND V21 EQ 2)
BREAKDOWN       TABLES=V53 BY V10 BY V1
*SELECT IF      (V1 EQ 2)
*SELECT IF      (V2C EQ 1 AND V21 EQ 3)
BREAKDOWN       TABLES=V54 BY V10 BY V1
*SELECT IF      (V1 EQ 2)
*SELECT IF      (V2C EQ 2 AND V21 EQ 1)
BREAKDOWN       TABLES=V55 BY V10 BY V1
*SELECT IF      (V1 EQ 3)
*SELECT IF      (V2C EQ 1 AND V21 EQ 1)
BREAKDOWN       TABLES=V50 BY V10 BY V1
*SELECT IF      (V1 EQ 3)
*SELECT IF      (V2C EQ 1 AND V21 EQ 2)
BREAKDOWN       TABLES=V53 BY V10 BY V1
```

```
*SELECT IF      (V1 EQ 3)
*SELECT IF      (V2C EQ 1 AND V21 EQ 3)
BREAKDOWN       TABLES=V54 BY V10 BY V1
*SELECT IF      (V1 EQ 3)
*SELECT IF      (V2C EQ 2 AND V21 EQ 3)
BREAKDOWN       TABLES=V56 BY V10 BY V1
*SELECT IF      (V1 EQ 3)
*SELECT IF      (V2C EQ 3 AND V21 EQ 1)
BREAKDOWN       TABLES=V57 BY V10 BY V1
*SELECT IF      (V1 EQ 1 OR V1 EQ 2)
BREAKDOWN       TABLES=V47 BY V10 BY V13 BY V19
*SELECT IF      (V1 EQ 1 OR V1 EQ 2)
BREAKDOWN       TABLES=V48 BY V10 BY V13 BY V19
*SELECT IF      (V1 EQ 3)
BREAKDOWN       TABLES=V47 BY V10 BY V13 BY V19
*SELECT IF      (V1 EQ 3)
BREAKDOWN       TABLES=V48 BY V10 BY V13 BY V19
FINISH
```

```
SORT CASES      V1
REPORT          FORMAT=LIST TOTAL/
                STRING=NAME(V3 V4 V5 V6 V7)/
                VARS=NAME(15),V10(LABEL)(5),
                     V19(LABEL)(4),V20(LABEL)(6),
                     V21(LABEL)(6),V22(LABEL)(3),
                     V23(LABEL)(6),V28(LABEL)(4),
                     V27(LABEL)(4)/
                CHEAD='UNIVERSITY OF DETROIT'
                      'UDPU,LAW,DENTAL FACULTY'
                      'DATA FOR FYE 82'/
                LFOCT='SOURCE OF DATA: HEGIS FILE'/
                CFOCT='INSTITUTIONAL RESEARCH NSF 11-81'/
                RFOCT='PAGE)PAGE'/
                BREAK=V1(LABEL)(PAGE)/
                SUMMARY=VALIDN'N OF CASES'/
```